DOCUMENT RESUME

ED 041 162 08 VT 011 520

AUTHOR	Clifford, Jack W.; And Others
TITLE	Service Station Attendant and Light Automotive Maintenance, Course Description.
INSTITUTION	Minneapolis Public Schools, Minn. Work Opportunity Center.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C. Bureau of Research.
BUREAU NO	BR-5-0187
PUB DATE	69
GRANT	OEG-3-6-000383-0848
NOTE	37p.
EDRS PRICE	EDRS Price MF-$0.25 HC-$1.95
DESCRIPTORS	Annotated Bibliographies, Attendants, Auto Mechanics, Course Descriptions, Course Objectives, *Curriculum Guides, *Disadvantaged Youth, Dropout Programs, *Dropout Rehabilitation, Service Education, *Service Occupations, Teaching Techniques, *Trade and Industrial Education
IDENTIFIERS	*Elementary Secondary Education Act Title III, ESEA Title III

ABSTRACT

Prepared by instructors and curriculum specialists, this course of study was designed to meet the individual needs of the dropout and/or hard-core unemployed youth by providing training as a service station attendant and light automotive maintenance mechanic. The achievement level of each student is determined at entry, and small instructional units are used to provide continuing positive reinforcement to minimize frustration. Training in this area is conducted in a public service station operated by the Work Opportunity Center. Instruction is provided in driveway sales, lubrication engine tune-up, brake work, and other repair and maintenance tasks short of major overhaul or body work. Students may receive such related instruction as mathematics, sales, accounting, and communications at the Center in addition to the related units taught at the station. Brief descriptions of other instructional areas, teaching techniques, material utilization, motivational devices, and case studies are appended. Related materials are available as VT 011 518-VT 011 533 in this issue. (GR)

ED041162

BR5-0187 (1)
PA.08.
JT

SERVICE STATION ATTENDANT

COURSE DESCRIPTION

OCL

OCCUPATIONAL

ED041162

THE MINNEAPOLIS
PUBLIC SCHOOLS

WORK OPPORTUNITY CENTER
107 Fourth Street Southeast
Minneapolis, Minnesota 55414

1969

SERVICE STATION ATTENDANT
and
LIGHT AUTOMOTIVE MAINTENANCE.

REPORT PREPARED BY:

Jack W. Clifford
Donald Nelson
Instructors

Floyd L. Anderson
Curriculum Development Specialist

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

MINNEAPOLIS PUBLIC SCHOOLS

Dr. John B. Davis, Jr.
Superintendent of Schools

Nathaniel Ober
Associate Superintendent
Secondary Education

Harry N. Vakos
Assistant Superintendent
Secondary Education

Donald D. Bevis
Assistant Superintendent
Special Federal Projects

Raymond V. Nord
Director of Vocational, Technical
and Industrial Education
Principal Investigator
Work Opportunity Center

Charles F. Nichols
Principal – Director
Work Opportunity Center

ACKNOWLEDGMENTS

Mrs. Jean M. Sontag for typing the description
Mr. Ervin W. Bly and students for printing
Mr. Patrick D. Murrill for the cover design
Michael P. Joseph, Ph. D., Research Director
Mr. Roy E. Almen, Research Assistant
And other members of the Center staff

The work presented herein was performed pursuant to
grants from the United States Office of Education,
Department of Health, Education, and Welfare.

INTRODUCTION

In May 1966 the Minneapolis Public Schools received a Federal Grant under section 4C (Research) of the Vocational Education Act of 1963. This grant was provided to finance an educational endeavor designed to meet the individual needs of the dropout and/or hard-core unemployed youth in the 16 through 21 year age group in terms of skill training, related information and supportive services.

Funds are also received from the Minnesota Department of Vocational Education, Title III of the National Elementary and Secondary Education Act, and the Minneapolis Public Schools. All certificated personnel at the Work Opportunity Center must be vocationally certified under the Minnesota State Plan for Vocational Education.

It was felt at the outset that if we were to deal effectively with students in school, it would be necessary to help them deal with their problems out of school. At the present time the WOC staff numbers fifty. Included are personnel in guidance, work coordination, social work, research, health, clerical, building maintenance, and administration.

Facilities are provided in the following areas: Business Education, Communications (related), Creative Art, Drafting (related), Dry Cleaning, Electricity and Electronics, Food Preparation and Service, Homemaking (clothing and interior decorating), Homemaking (personal improvement and foods), Machine Tool Operation, Marketing and Merchandising (retail sales), Mathematics (related), Nurses Aide and Hospital Orderly, Offset Printing, Reading (remedial and developmental), Service Station Attendant and Light Automotive Maintenance, Small Engine Maintenance and Repair, and Social Communications (related). Brief descriptions of these instructional areas appear in Appendix A of this report.

Because of a general and local need for workers in nearly all occupations, the selection of technical course offerings was based largely on kinds of occupations, i.e., those in which a worker has good opportunities for advancement if he has the ability and desire to do so.

Because this report is concerned with the curriculum of a particular instructional area, program descriptions of supportive services are not included. This information is available in the WOC Summary Report of Activity and Research for the period May, 1966 to June, 1968.

The basic differences between instruction at the WOC and in conventional schools are in the setting and the approach.

The setting is a non-school type building with an informal, relaxed atmosphere. Class size is small. No one is ever too busy to give a student some of his time when the student needs it. The unique feature of our "rules and regulations" is that they are either functional or non-existant. The Student Advisory Committee has a strong voice in determining the rule structure at WOC and its implementation. A basic requirement is that a student be enrolled in a technical area. Other than that, decisions are made by students, with all the help they need or will accept from teachers, counselors, social workers, work coordinators, clerical staff, and administration.

The approach focuses on the individual. His needs are paramount. Each student is accepted as he is. His level of achievement or performance is determined, not assumed. He is taken from where he is and is assisted as far as he will go in the shortest possible time. No instructor or student is burdened with a standardized curriculum or a fixed set of materials. Grades are not used. Content is broken down into small instructional units in order to provide continuing positive reinforcement

and to minimize frustration. Successes, however insignificant, are emphasized. Instructors are sincere in their efforts with students for two reasons: 1. Teacher selection was based largely upon the possession of this characteristic of sincereity and, 2. An instructor without a sincere approach would soon have an empty classroom, for the only "hold" he has on his students are the relationships he can establish with them. These positive relationships are not always easy to establish, in fact, are not established at all in some cases (we also have our dropouts).

A listing of techniques, materials, and motivational devices that have been selectively utilized by WOC staff appear in Appendix B of this report.

The results of this kind of an approach are satisfying when evaluated in terms of positive attitudinal changes over a period of time. An outstanding example is the fact that in a school population where approximately one-fourth of the students are on probation or parole, and nearly all have dropped out of the conventional school, there has not been one discipline problem in a classroom or training area.

Floyd L. Anderson
Curriculum Development Specialist

Table of Contents

SERVICE STATION ATTENDANT

and

LIGHT AUTOMOTIVE MAINTENANCE

Page

Statement of Objectives 1

Attainment of Objectives 5

List of Instructional Topics 8

Annotated Bibliography 11

Appendix A

Brief Descriptions of Work Opportunity Center Instructional Areas A-1

Appendix B

Techniques, Materials, and Motivational Devices B-1

Appendix C

Case Studies C-1

STATEMENT OF OBJECTIVES

To develop in each student:

1. The ability to perform driveway sales and service.
2. A working knowledge of the products handled in a service station.
3. Good habits of station cleanliness and personal appearance.
4. The ability to build merchandise displays and develop sales promotions.
5. The ability to diagnose automotive malfunctions and perform maintenance and minor repairs.
6. A basic understanding of the problems of service station management.
7. An awareness of the need for safe work practices.
8. Desirable work habits and positive attitudes toward work.

OBJECTIVE 1

To develop in each student the ability to perform driveway sales and service.

A student achieving this objective will:

1. Have a knowledge of federal, state, and local regulations concerning petroleum products.
2. Be able to greet and take customer's order.
3. Perform driveway services in a satisfactory manner.
4. Be able to complete sales, use a cash register, and make change.

OBJECTIVE 2

To develop in each student a working knowledge of the products handled in a service station.

A student achieving this objective will:

1. Have a knowledge of gasoline, oil and TBA items.
2. Be able to look up specifications.
3. Be able to look up prices.

OBJECTIVE 3

To develop in each student good habits of station cleanliness and personal appearance.

A student achieving this objective will:

1. Know how to clean a service station inside and outside.
2. Keep tools in an orderly arrangement.
3. Understand what constitutes correct appearance on the job.

OBJECTIVE 4

To develop in each student the ability to build merchandise displays and develop sales promotions.

A student achieving this objective will:

1. Understand basic principles used in sales promotions.
2. Be able to build window, impulse, and "big sale" item displays.
3. Locate displays for greatest effectiveness.
4. Understand the need for clean display racks and merchandise.
5. Be able to create sales promotion schemes.

OBJECTIVE 5

To develop in each student the ability to diagnose automotive malfunctions and perform maintenance and minor repairs.

A student achieving this objective will:

1. Have working knowledge of auto engine operation, electrical systems, exhaust systems, cooling systems, wheel balancing, brake systems, fuel systems, and lubricants and lubrication.
2. Be able to lubricate engine, chassis, wheels, transmission, differential, etc.
3. Install and repair tires properly.
4. Know how to wash and wax a car.
5. Be able to clean the interior of a car.

OBJECTIVE 6

To develop in each student a basic understanding of the problems of service station management.

A student achieving this objective will:

1. Be able to maintain necessary day to day service station records that make business control possible.

2. Understand the basic controls necessary to maintain financial solvency.

3. Understand necessary tax and insurance obligations.

OBJECTIVE 7

To develop in each student an awareness of the need for safe work practices.

A student achieving this objective will:

1. Have a knowledge of safe work practices for various items of equipment and tools.

2. Have a knowledge of hazardous areas in the station and know how to cope with them.

OBJECTIVE 8

To develop in each student desirable work habits and positive attitudes toward work.

A student achieving this objective will:

1. Develop an awareness of and respect for employer expectations.

2. Work cooperatively with fellow employees.

ATTAINMENT OF OBJECTIVES

The service station attendant training course is geared to instruct students in the techniques of selling gasoline, oil and related petroleum and automotive products. Students also receive instruction in the areas of tune-up and light automotive repairs. The training facility is a service station leased from the Standard Oil Company and operated on a regular "open to the public" basis. This arrangement provides actual on-the-job training in a sheltered setting. New students are taken in every week as is the case in all other programs at the Work Opportunity Center.

When a new student is registered in this training area he is taken on a tour of the station to become familiar with the surroundings and to meet other students. As his orientation period continues he is briefed on safety precautions and other necessary ground rules.

Training for each student starts with driveway sales and station maintenance. As his skills and knowledge increase he is gradually worked into the areas of lubrication, tune-up, and light automotive repairs.

Students receive individual instruction in driveway sales by working with the instructor on the drive selling gasoline, checking oil, cleaning glass, etc. Instruction is also given in the use of credit cards, completing cash sales, and writing up work orders. When a student has learned what techniques are involved he works on the drive with a more advanced student to polish his newly acquired skills. This instructional method is also used as he progresses into the lubrication and maintenance phases of the program. Students, however, are not required to move into these phases. Some of them prefer to remain in sales and they generally are placed in stations that sell only, commonly called station stores.

When a student gets into the repair area he is started immediately on a repair job on a customer's car. He completes this task under extremely close, step-by-step supervision. The student must be successful on this first job. Most of our students are failure oriented and it is imperative that they get a taste of success as soon as possible. Progress in attitudinal change follows success. They become more interested in their work and begin to develop a better self-image. At the same time they are discouraged, in subtle ways, from attempting repairs away from the station that they are not capable of completing. Logically, as their knowledge and skills grow they are assigned more complicated jobs. Because of the nature of the service station business it is not always possible to move a student through a series of jobs in a fixed sequence. An attempt is made however, to schedule certain kinds of jobs into the shop when they are needed. Instructors and students have constructed some training devices that help fill in the gaps whenever necessary. The instructors have found that close supervision is necessary on all jobs because occasionally a student completing a job will not be the same one that started it.

To help insure success several student check lists have been devised. These check lists help the student to follow a logical pattern of steps in completing the assigned job. This list also serves as an instructor check list.

A continuing effort is made to involve students in related courses such as distributive education, mathematics, business education, reading, welding, etc.

Students have been successfully incorporated into the NYC program

to help keep up with the continuing tasks of clean-up and stock handling. Title V employees have been involved successfully in the program as advanced students and also for ordering and picking up parts.

INSTRUCTIONAL TOPICS

1. WOC station policies
2. Federal, state and local regulations
3. Station hazards and station safety
4. Approach, greet, and get customer's order
5. Pump gasoline
6. Wash windshield, windows, and lights
7. Check, sell, and add oil
8. Check radiator
9. Check battery, observe fan belts, check windshield cleaner solvent, observe general motor area
10. Salesmanship
11. Complete sale and collect payment
12. Computing sales tax
13. Tips on money handling
14. Making change
15. Handling checks
16. Gasoline product knowledge
17. Oil product knowledge
18. Oil filter product knowledge
19. Air cleaner product knowledge
20. Battery product knowledge
21. Winter protection products knowledge
22. Cooling system products knowledge
23. Additive products knowledge
24. Car clean-up product knowledge

25. Tire products knowledge

26. Tire and chains product knowledge

27. Maintenance of building, driveway, and yard

28. Keeping office, storeroom, and tool crib neat and clean

29. Cleaning rest rooms

30. Impulse and sales displays

31. Window displays

32. Locating displays for greatest effectiveness

33. Sales promotion

34. Auto electrical system

35. Service spark plugs

36. Perform distributor maintenance

37. Discuss coils and capacitors

38. Engine tune-up

39. Service a generator

40. Service a starter

41. Perform head and tail lamp maintenance

42. Perform stop and turn signal maintenance

43. Replace exhaust system

44. Service a thermostat

45. Replace a radiator and heater hose

46. Perform cooling system maintenance

47. Adjust and/or replace a fan belt.

48. Balance a wheel - bubble method

49. Repair, adjust, and bleed Bendix and Chrysler brake systems

50. Pack front wheel bearings

51. Test and replace fuel pump

52. Clean and adjust a carburetor

53. Rebuild a carburetor

54. Change engine oil

55. Change an oil filter

56. Lubricate chassis and perform normal services done at this time

57. Install shock absorbers

58. Dismount and mount a tire

59. Repair a tubeless tire - outside method

60. Repair a tubeless tire - inside method

61. Repair a tube type tire

62. Wash an automobile - hand method

63. Wash an automobile - high pressure method

64. Wax an automobile

65. Shampoo interior carpet

66. Clean interior (seats, doors and headliner)

67. Make out a job sheet

68. Compute labor costs

69. Writing product warranties

70. Product warranty adjustments

71. Take an inventory

72. Repair parts suppliers

73. Order replacement merchandise

74. Order repair parts

75. Service station bookkeeping

76. Tax obligations

77. Insurance obligations

78. Personnel practices

SELECTED ANNOTATED BIBLIOGRAPHY

BOOKS

Glenn, Harold D., Glenn's 1964 Auto Repair Manual. Philadelphia: Chilton Books. 1964.

A good reference manual for older car repair work.

Murphy, Paul A., ed., Chilton Auto Repair Manual. Philadelphia: Chilton Books. 1969.

This reference manual provides students and instructors necessary information when doing repair work.

Murphy, Paul A., ed., Chilton Flat Rate Manual. Philadelphia: Chilton Books. 1969.

A good reference manual for computing current labor costs.

Richert, G. Henry, and others, Retailing Principles and Practices. Chicago: Gregg Publishing Division, McGraw-Hill Book Company, Inc., 1962.

PERIODICALS

Service Station Management. Hunter Publishing Company, Inc., 205 West Monroe, Chicago, Ill. 60606.

A good publication for showing student competitive lines of merchandise and new ideas in station management.

Super Service Station. Irving-Cloud Publishing Company, Inc., 7300 North Cicero Avenue, Chicago, Ill. 60646.

This is a very good publication for keeping up on new ideas in service station sales techniques.

PUBLICATIONS OF THE GOVERNMENT OR OTHER ORGANIZATIONS

Atlas Price Guide. Current edition, Standard Oil Company, Minneapolis, Minnesota.

Published every three months.

Atlas Service Guide. Volume I, Tires and Batteries, American Oil Company, Minneapolis, Minnesota. 1969.

Atlas Service Guide. Volume II, Accessories, American Oil Company, Minneapolis, Minnesota. 1969.

A very good instruction manual showing step by step procedures for service and repair work.

Atlas Specifications. Standard Oil Company, Minneapolis, Minnesota. 1969.

This publication is used for selecting Atlas replacement parts from stock and has complete cross reference charts.

11 Golden Opportunities. Service card #SP2772. Standard Oil Company, Minneapolis, Minnesota.

A card listing 11 sales techniques for driveway selling.

How to Sell Motor Oil. American Petroleum Institute, Division of Marketing, New York, New York.

A good booklet for driveway sales techniques.

Minnesota Sales Tax Chart. Minnesota Department of Taxation, St. Paul, Minnesota.

Profitable Gasoline. Dealer Training and Development Program, Standard Oil Company, Minneapolis, Minnesota. 1969.

This booklet is a good reference for driveway sales training.

Red Container Law. Minnesota Department of Taxation, St. Paul, Minnesota.

AUDIO-VISUAL MATERIALS

Films:

Safe Driving: Car Maintenance and Care. (1 reel) 16mm sound, $1.75 rental, University of Minnesota, Audio-Visual Department, 2037 University Avenue, Minneapolis, Minnesota.

This film shows a good overview of the importance of preventative maintenance.

Other:

Field Trips to Service Stations.

Used to provide students the opportunity to observe sales personnel and mechanics at work.

Field Trips to Auto Service Garages.

APPENDIX A

BRIEF DESCRIPTIONS OF WORK OPPORTUNITY CENTER INSTRUCTIONAL AREAS

BUSINESS EDUCATION

Instruction is offered in typing, filing, bookkeeping, record keeping, and in the use of small calculators, key punch machines, and office duplicating equipment. All instruction is based on current business practice. There are many positions open to students who complete this training. Included are jobs as typists, file clerks, receptionists, and key punch operators.

COMMUNICATIONS (related)

Students work individually at improving their oral language usage, writing skills and study habits. A wide variety of printed materials, audio-visual equipment and materials, and the use of individual study carrels facilitate student progress. Work may be directed toward transfer credit, GED test preparation, or job related skills.

CREATIVE ART

Students work independently. Individual instruction is provided with a wide variety of materials and equipment. The goal is the development of confidence in the areas of decision making, self-expression, and evaluation in art and everyday life. Within this framework, a student may study in depth or he may explore several areas.

DRAFTING (related)

Students taking this course learn the basic elements of drafting. The instructor cooperates closely with the teachers and students in the machine tool operation and electricity and electronics areas in order to teach the drafting and blueprint reading related to these specialized occupations. There are many positions open to machine draftsmen. The skills involved are also basic to a variety of related jobs. Qualified students are referred to area vocational schools, technical schools, or apprenticeship programs for further training.

DRY CLEANING

Students in this area are instructed in all phases of operation of a modern dry cleaning plant. They are encouraged to specialize if they express a desire to do so. Instruction in marking, invoicing, and customer service is handled by the marketing and merchandising teacher. Students can learn basic tailoring and garment repair in the sewing section of the homemaking area. Persons possessing these skills are in great demand in the Minneapolis, St. Paul area.

ELECTRICITY AND ELECTRONICS

This course provides instruction in the fundamental principles of electricity and electronics. Topics include codes, laws, terms, and techniques common to this field. Modern testing equipment is used to diagnose and locate problems in radio and television receivers in order to complete necessary adjustments or repairs. With the present rapid expansion of this field, persons with basic knowledge and skills have little difficulty finding positions in production, service and repair or in advanced training programs.

FOOD PREPARATION AND SERVICE

Students in this area are instructed in the preparation and serving of soups and sauces, vegetables, meats, desserts, and breads. They also gain experience in selecting, ordering, receiving, and storing foods. Instruction is given in proper methods of setting tables and serving customers for those interested in this phase of the industry. Students completing this course are qualified to work in one or more of the following positions: salad worker, short order cook, cooks helper, kitchen worker, bakers helper, and waitress or waiter.

HOMEMAKING (clothing and interior decorating)

Students in this course receive instruction and practical experience in the areas of sewing, garment selection, and home and money management. Other units include interior decorating and related crafts. A special unit in basic tailoring is available for men that are learning dry cleaning. Students may use these skills in their own homes or as a basis for a variety of related occupations.

HOMEMAKING (personal improvement and foods)

Students taking this course work independently in the following areas: personality development, health improvement, foods, and marriage and family living. Topics covered within these areas include proper diet, exercise, grooming, wardrobe care and planning, visual poise, home food preparation, infant care, etc. Young men or women may select one or more parts of this program according to their interests or needs.

MACHINE TOOL OPERATION

Training in machine tool operation stresses the development of skills through practical experiences. Instruction is also provided in related topics. Machines used include the drill press, engine lathe, bench grinder, surface grinder, cutoff saw, and vertical and horizontal milling machines. Students completing this training are qualified for a variety of entry level positions in machine shops.

MARKETING AND MERCHANDISING (retail sales)

Emphasis in this course is placed on retail sales. Theoretical and practical instruction is provided in clerical skills, duties of salespersons, the selling process, and human relations. Review and practice in mathematics and communications is arranged when necessary. Two specialized areas included are cashier-checker and dry cleaning counter girl training. Many full and part-time positions are available to students possessing skills in the field of retail sales.

MATHEMATICS (related)

Instruction is provided on an individual basis for students who desire mathematics related to their technical interests. Work in this area may also be directed toward a high school diploma or the GED certificate. A stimulating variety of materials and methods are used to present theory and practical application.

NURSES AIDE AND HOSPITAL ORDERLY

Students taking this course are instructed in the knowledge and skills necessary for working as aides or orderlies in hospitals and nursing homes. Six to twelve hours a week are spent caring for patients in hospitals or residents in nursing homes. This experience is also valuable to students in home situations.

OFFSET PRINTING

This course provides training in offset printing and related darkroom procedures. Instructional units include composition and layout, process camera operation, stripping, plate making, small press, and finishing operations. Minnesota ranks very high nationally in the number of workers employed in the graphic arts industry. Students completing this course find many entry level positions open to them.

READING (remedial and developmental)

The specific nature of each student's reading problem is diagnosed. A program for remediation or improvement is designed by the instructor and student. A variety of equipment and material is used, ranging from that suitable for very disabled readers to that useful with students reading at the college level. An effort is made to relate classroom experiences to the technical area in which the student is enrolled. Emphasis is placed upon individual contact, with each student given continuing encouragement in his efforts to improve.

SERVICE STATION ATTENDANT and LIGHT AUTOMOTIVE MAINTENANCE

Training in this area is carried on in a WOC operated service station that is open to the public. Instruction is provided in driveway sales, lubrication, engine tune-up, brake work, and other repair and maintenance tasks short of major overhaul or body work. Students may receive related instruction in mathematics, sales, accounting, communications, etc. at the Center in addition to the related units taught at the station.

SMALL ENGINE MAINTENANCE and REPAIR

Persons enrolled in this course work independently on a variety of WOC, student, and customer owned two and four cycle gasoline engines. Instructional units in servicing, adjustment, repair, and overhaul are included. Students seeking employment in this field or those having to operate small gasoline engine powered equipment benefit greatly from this instruction.

SOCIAL COMMUNICATIONS (related)

Student interests and needs are given primary attention. The course offerings include independent study in psychology, government, labor unions, human relations, etc. A large number of references and audio-visual aids are available for student use. Instruction is presented on an individual basis as well as in small discussion groups.

APPENDIX B

TECHNIQUES, MATERIALS, AND MOTIVATIONAL DEVICES

Techniques, materials, and motivational devices that have been selectively utilized by Work Opportunity Center staff are listed below.

TECHNIQUES

1. Teacher-student talks. Teachers endeavor to determine where a student is, achievement-wise, and work with him from that point.

2. Subject matter content is divided into short instructional units, one-half to two or three hours in length.

3. Students are praised for completing a task or short unit. They may receive awards of merit for completing groups of units three or four weeks in length.

4. Students are often allowed to make their own choice as to what materials they will read or study.

5. Work and a record of progress is frequently kept up to date by the student. Self-evaluation - kept in individual student folders.

6. Teachers encourage students to move on to successively difficult tasks when success has been achieved on easier ones.

7. Open door policy - a student may come in anytime either to work or ask a question. Students are, however, encouraged to attend classes as they are scheduled.

8. Frequent, well organized field trips. Students decide where to go and what to look for.

9. Students are asked to make written comment on what they read - little correction - emphasis is placed on ideas and expression, not on grammar, spelling, etc. - teacher learns from and about student.

10. Compliments received concerning performance, attitude, etc. are shared with the student or students involved.

11. Good attendance is encouraged - emphasis is placed on days attended, not days missed.

12. Students keep own attendance by signing in and out of class.

13. Students are occasionally given blocks of work and allowed to progress as fast as possible.

14. Students are urged to call in when they are going to be absent. If a student doesn't call, the instructor or outreach worker calls the student. The emphasis is on better attendance, not excuses.

15. Classroom atmosphere is informal, relaxed, conducive to self-expression. Adverse competition is all but eliminated.

16. Student participation in planning the next day's work increases attendance.

17. Success is increased greatly when class size is kept small. This permits more individual attention, closer supervision, and programs of instruction tailored to individual needs and rates of learning.

18. Teachers notify intake personnel when they feel their class is full. The class size varies with the amount of individual attention each student needs. When the teacher can work with more students they are assigned.

19. Incoming students are given a brief test to determine reading level. Instructors are made aware of each student's reading ability. Students may also be programmed into a remedial or developmental reading situation.

20. Student and teacher work out the fine points of scheduling - agree on short and long-term goals.

21. The programming of students and jobs through the shop is done in the manner followed in industry.

22. Length of class periods and courses are flexible - depends on student proficiency and attitude.

23. Each individual is accepted as worthy regardless of personal appearance, manner of dress, or personality characteristics that may seem negative.

24. The use of advanced students to assist in the instruction of newer students has positive effects on both.

25. Instructors endeavor to establish a "helping" relationship..."I am going to help you get ready for this job." This approach emphasizes "partnership" in learning.

26. Every effort is made to get the students "doing" as soon as possible.

27. Two or more training areas may cooperate in teaching several phases of a course, e.g. Dry Cleaning - Marketing and Merchandising - Homemaking (sewing).

28. Lecturing, preaching, bossing, or threatening by the instructor is avoided.

29. Students are allowed to clean and press their own clothes or those of their family. They become much more critical of their work in these cases.

30. Homework is not assigned unless a student expresses a desire for it.

31. Most technical areas require very little reading or written work. Emphasis is placed on performance.

32. New students enter the program every week.

33. An intensive two-day orientation program is designed to made students feel comfortable in a new setting.

34. Students in the food preparation area plan a menu for the week and then prepare all of the food. Cafeteria-classroom is open to the public.

35. When a student exhibits greater than average interest in an area or department he is encouraged to specialize.

36. Regular office desks and equipment are used in Business Education. Room is arranged like an office.

37. Students are encouraged to accept their peers.

38. Students are asked to underline words or phrases in paperbacks or magazines. The instructor and student then go over these together.

39. The Marketing and Merchandising area is organized like a retail store using regular store equipment.

40. Students are never told that they are not capable of certain things. They are expected to perform. When necessary, realistic alternatives are presented.

41. Dry Cleaning - the use of student planned weekly "Specials", e.g. two skirts for the price of one. This enables students to polish their skills on selected kinds of garments.

42. Instructors avoid negative or emotional reactions.

43. Kindness is shown toward students. They are cared about. Emphasis is on the positive.

44. Instruction is personalized. Students' pictures or portraits (pencil sketches) are posted. Student dress is admired and commented favorably upon if it is in good taste.

45. Students are encouraged to get more education and training.

46. Tape recorders are used to improve oral language usage.

47. Students are shown a process, then allowed to try it themselves. If necessary, they are shown again. They are much more receptive the second time.

48. A manikin is used for student demonstration work in nurses aide classroom.

49. Nurses Aide students receive practical experience in a hospital or nursing home under the supervision of the instructor. They are encouraged to develop their own techniques in handling patient problems.

50. Overhead projectors are used for small group presentations.

51. In creative art demonstrations and/or experiments are carried out by a student or the instructor. This has the effect of motivating other students to try their hand at another art-form.

52. Tests, when used, show a student what he has learned. They are not used to determine grades. Grades are not given.

53. Marketing and Merchandising students learn about qualities of cashiers by going to stores and rating the cashier that waits on them.

54. An attempt is made to have each student learn something new each day.

55. Individual work station tool panels aid shop efficiency and have reduced loss of tools.

56. Student comments or criticisms are accepted with the idea of improving content, techniques, etc.

57. Emphasis is placed upon learning concepts through experiences rather than reading about them.

58. High quality work is encouraged and expected rather than just enough to "get by".

59. Entry and subsequent tests in Business Education are used to show the student what gains he has made.

MATERIALS

1. Short, instructor-produced, materials have been developed on a variety of topics.

2. Pamphlets and paperbacks are used extensively in several areas.

3. Selected materials in related subjects are directed toward the student's vocational interest area.

4. Several newspapers and a large selection of current magazines are used in Reading, Communications, Homemaking, and Social Communications.

5. An individual study sequence in psychology is used in Social Communications that helps promote self-understanding.

6. A series of questions, the answers to which can be found in current magazines, pamphlets, almanacs, atlases or filmstrips.

7. Students select and study materials with large print more often than those with small print.

8. Government Printing Office publications are used in nearly all areas.

9. Language lessons are used that employ local examples and student written sentences.

10. Trade and industrial publications are used in the technical and related areas.

11. No single textbooks are used. Reference materials are available that vary in difficulty and emphasis to accommodate student's ability and interest.

12. A series of retail sales language lessons were developed using Marketing and Merchandising materials.

13. Series of polaroid pictures are mounted and used to show the steps in various processes.

14. Programmed materials are used in several areas. They are supported by individual discussions and problem solving sessions.

15. A card game designed by the students and instructor is used to help students learn capitalization skills.

16. Programmed texts are used in a few areas to polish basic skills.

17. Sound filmstrips used in several areas with projectors that are designed for viewing by one to three persons. These are student operated.

18. Students in two areas are learning new words through the use of a modified tape recording machine utilizing cards with a strip of magnetic tape attached.

19. Films, filmstrips, and sets of slides produced by industry are available for loan or purchase - several areas use them.

20. Teacher produced manuals are used for training checker-cashiers and dry cleaning counter girls.

21. A few games are used in mathematics. The structure and strategy of games provide entry into a wide range of mathematical concepts.

22. Pre-recorded vocabulary tapes are used by students who need work on pronunciation.

23. Industry-produced charts and posters are used by several instructors.

24. Samples or portions of garments are made up showing steps and/or techniques of clothing construction. These are displayed on a series of flip charts.

25. Selected printing jobs are accepted from within the school district if they can be fitted into the training schedule.

26. Students browse and select books on art. They are encouraged to take these home for reading. If the book is a paperback they may keep it.

27. Glaze charts for the four kinds of clay used in art have been presented in four different ways -- mosaic, windchime, freeform mosaic, and relief. These charts, while primarily informative, have also had a motivating effect on students.

MOTIVATIONAL DEVICES

1. Art Shows - Several Art Shows have been set up at W.O.C. and at other places around the city. Work that is on display is also for sale. Most students find greater reward in the fact that people actually liked their work well enough to buy it -- money received seems to be secondary.

2. Coupons - Students receive a coupon worth ten cents for each class they attend. Coupons may be redeemed for lunches, dry cleaning, or automotive service. This system is very popular with the students. It generates several positive effects within our program in addition to providing immediate reinforcement of attendance.

3. Student Projects - Student owned engines, radios, etc. and private non-school equipment are worked on with much more enthusiasm than school training equipment.

4. Polaroid Camera - Pictures are taken of the student at the beginning of a sewing project, as it progresses, and at its completion. These pictures along with samples of the material and different details are mounted on an accordion-pleated story board. Students stop frequently to look at their progress and the progress of others. They also get great pleasure out of bringing in their friends to show them what they have accomplished.

5. Short Term Assignments - Short term assignments have been found to be one of the better motivational devices. A student is more likely to start and work on an assignment if he can see the end.

6. Checklist - A checklist of assignments, worksheets, projects, meetings, and activities is maintained in several areas. As each student in the class completes an activity, a checkmark is put in the proper square.

7. Successful Student Display - A large bulletin board upon which is displayed a close-up snapshot of each student who has gained clerical employment after having attended the Work Opportunity Center and has taken business training. A caption under the picture simply lists the student's name, place of employment, and type of work being performed. Some are depicted by two photos in a "before" and "after" arrangement. Prospective and beginning business students seem highly motivated by this display as they see the success being enjoyed by those pictured.

8. Time Clock - Most small engines students become hourly employees. A time clock was introduced as a training device. Use of this clock has motivated students toward better attendance. It has also simplified record keeping and provides a quick, line of sight reference showing who is in the shop. A time clock is also used in the marketing and merchandising classroom as it would be used in a place of business. Each student "punches" in or out for class as they would on a job. A student is assigned a rate per hour and calculates his earnings. Problems in determining deductions are also used. As a student progresses, his salary rate goes up.

9. Awards of Merit - An award of merit certificate is used in many areas of the Work Opportunity Center. The awards are earned by students for attending various series of classes and for completing certain tasks and assignments. For many students this may be the first such recognition they have received.

10. Insignia - Food Preparation is divided into five levels of accomplishment. Sleeve stripes are awarded to students for performance and attendance in various levels, and also inform the public of the student's position in the kitchen. Students attend and perform to be promoted from one level to another. Promotion is based on agreement of the instructor and the student department head and voted on by the entire kitchen staff.

11. Path to Charm - On "The Path To Charm" certificate, students plot their course with various colored stars as they complete units in personal improvement. Pictures taken with the Polaroid camera are inserted behind a felt paper frame on the certificate. These add recognition and a personal touch which the students need so desperately. Replacement pictures are taken and framed as the girls progress.

12. Books Expendable - This is a program which makes a variety of paperback books freely available to students. Several hundred volumes are on display, in bookstore-type wire racks, in the Reading Center. Students have complete freedom of choice in selection and are not required to seek permission before withdrawing a book. They are, however, encouraged to return the book when they have finished with it and to "swap" it for another. New titles are added each month to keep the collection up-to-date and to stimulate interest.

13. Written Contract System - Students enter into a written contract with counselors, teacher and others concerned. It "binds" both the student and the staff. He agrees to attend for a specific number of class hours, a specific number of days per week with the contract written for a relatively short period of time, depending on the resources of the student.

14. Point System - Because high school credit is important to many of our students, a point system is in effect in most areas of W.O.C. This system helps provide continuing reinforcement and facilitates record keeping and evaluation. One point is the equivalent of approximately one hour of work. Eighty points equals one credit. Fractional credit may also be recommended. This system complements the W.O.C. program.

15. Chart of Learning Units - A chart is on display in the business room depicting the various courses being offered. These courses are subdivided into fractional parts or learning units. The unique feature of the chart is in the visual subdividing. It is greatly simplified so that the student is not threatened by a feeling of insurmountable course work. Credit or check off is made early and quickly after the completion of the most rudimentary tasks. This is recorded on the business student's record card. As the student progresses through the learning units, credit and check off is given at specific junctures.

16. Field Trips - Art students have taken field trips to art museums, galleries, studios, exhibits, and theatres. Hikes and/or sketching trips have been taken to a dancing studio, the river, the downtown area, and the zoo. These trips are popular with the students and are always well attended.

17. Consultations - Individual and group consultations with students help eliminate grievances, improve attitudes, improve attendance, and make the students feel important. They also help instructors determine student needs, desires, etc. and make possible better referrals to other departments.

18. Re-Organization of Service Station - Peg board storage for tools - shelving for oil, etc. - rearranging of impulse sales items, painting back room and office, complete change of salesroom and office area. Helped establish a proprietory attitude in students - it's "our" or "my" station now.

19. Uniforms - An adequate supply of uniforms is maintained at all times at the Service Station and in the Cafeteria. This not only provides clean uniforms at all times, but has also been a definite, motivating factor in these areas.

20. Machine Parts - Students in the machine shop, on occasion, make parts for and rebuild machines that are no longer operable or are inaccurate to the point that they are of little value. This has been an excellent motivational device. A student can actually see the part that he produced functioning as a part of the machine.

21. Unstructured Time - Students are invited into the sewing room to work on an interior decorating oriented craft. A variety of simple projects have been completed. Each student keeps his project. A number of students who previously had little or no contact with each other have worked together in an atmosphere of friendliness and cooperation. These sessions are unscheduled, but generally take place once every four to six weeks.

APPENDIX C

CASE STUDIES

Case Study #1

The subject of this report is a 16 year old boy who came to the Work Opportunity Center with a rather large chip on his shoulder. His negative attitudes were generally reinforced by his companions with whom he spent much time on the streets of the inner city.

He was a lad who had many bitter experiences with schools and teachers, so it is not surprising that he felt as he did. He was slow in any learning situation and had not achieved well in his previous studies. He had a short attention span in academic matters, needed constant supervision, and seldom completed a task. Discipline problems began early in elementary school. Apparently he experienced much insecurity and was often rejected by the group and became their scapegoat. He often withdrew from challenging tasks. By the sixth grade he was retarded two grade levels in reading and in most other important achievement areas.

There were a large number of children in his family which resided in an inner-city home. A stepfather entered his life at age 9. The stepfather later became chronically unemployed and the mother became the sole support of the family.

A pattern of excessive tardiness and absence began to appear at the very outset of this boy's junior high years. His below-average achievement steadily grew worse even though he was placed in slow-moving groups. He had very few friends there, seemed to enjoy picking on others, was loud and boisterous and became belligerent toward authority. Mostly,

his actions were judged as immature attempts to compensate for his weaknesses.

Although he started senior high school, he was seldom present and very often tardy. He lasted less than a semester. No credits toward a diploma were earned.

It was about this time that his outside activities ran afoul of the law and he was taken into custody by youth correctional authorities. Later, now in his sixteenth year, he was referred to WOC by a probation officer and assigned to the service station for a period of four hours each day.

At the station, we had a small group in training so that we could spend considerable time in personal consultation, individual demonstration, and friendly supervised practice. This took place in our informal but completely authentic business establishment. We let this boy and the others know that only mature behavior was acceptable in this adult situation of dealing with customers and their cars. Very limited responsibility was placed upon him at first but it was gradually increased. He performed acceptably in this kind of situation.

In time, he became attached to the instructor. The growth in his abilities was noticeable. His mother seemed interested, too, and would stop in occasionally for conferences. However, there was not much other support from the home. At this time the boy would not accept any academic training. But we were generally pleased with his progress in skills-training under the circumstances.

The boy was restless for a job because he wanted money and greater independence. We did not discourage this enthusiasm but we had some doubts as to the real extent of his attitudinal readiness. Old habits

and values are difficult to change in a short time, but this lad had tasted some success and satisfaction in acceptable work attitudes, at least in our setting.

The boy was able to obtain a job at a service station near his home. But a short while later he was dismissed for allegedly misappropriating some of the station's money. He returned to the Center very disgusted and discouraged. Enthusiasm was waning and a short time later he simply ceased attending altogether. We contacted his home, but his mother was employed in order to support herself and her family and was not available for conference. She apparently had no luck in urging the boy back to the Center. In spite of our efforts, too, he would not return. He had definite ideas as to how he could best maintain his image in society and he was not ready to change them.

Later he found a job as a busboy at a downtown motel. What small gains he had seemingly made here failed to show there for any lengthy period. After an argument with his supervisor, he was discharged from that job. Our outreach worker kept up an occasional contact in an effort to be of further help to him. It was reported that he entered another poverty area training program but failed to follow through in it.

Here was a case in which a disadvantaged youth with a number of poor behavioral patterns, bad environmental influences, and few satisfying previous school successes, could not be changed overnight. The boy seemed to experience some positive gains in the Center's program but he was restless and most difficult to reach and hold for any period. We had hoped for a total commitment from the boy in our program but he was reluctant to release himself from his old, well-established life-style. Consequently,

we are still hoping to resume communications and as the boy becomes older, perhaps continue the upward trend from where he left off. Right now he seems to see training programs of any sort as foreign to his self-image.

Case Study #2

When the student in this report came to the WOC Service Station he was on probation for grand larceny. He was quiet, remained by himself, but was willing to do almost anything he was asked. Although he seemed to have ability, his achievement level was quite low. There was no encouragement from the home.

During the first few weeks his work was acceptable and he began to make friends with the other students. Later, on one occasion, he brought his girl friend to see the station and meet the instructor and other students.

He progressed rapidly and was becoming quite capable at the station when he was arrested for driving without a license. Thirty days later he returned to the Center. He stayed for two weeks and was arrested again for driving without a license. The instructor contacted several people and the student was issued a legal, but very restricted license.

Since that time he has been employed at a service station for a period of six months. He then accepted a position as a maintenance man at a commercial laundry.

He is presently employed at the laundry. There have been no more arrests and his employment record has been excellent.

Case Study #3

This student came to the Center with an almost total inability to read. His mechanical aptitude was quite high, and his eagerness to learn was above average.

His enrollment in remedial reading helped him, but was not enough to enable him to read the specification manuals or the technical instructions on how to use such equipment as the battery charger, etc.

We started a program of using colors or marks to help him set up various pieces of equipment and to read the results of the tests that he made. He learned very quickly.

The writing of credit cards was an especially difficult area for him. He worked hard at it and made slow but adequate progress. He was never the best, but did an acceptable job.

The student was sent out on an employment interview and was accepted, even though the work coordinator told the station owner of his reading difficulties. The station owner agreed to have him work during hours that would allow him to continue with his remedial reading.

The student has now been employed for about nine months. His employer is very satisfied. His work in remedial reading at the Center is continuing and some progress is being made.

Case Study #4

This student came to the station with a great deal of hostility toward any type of authority.

Working with the instructor in a very close one-to-one teaching-learning situation he progressed at his own pace in mechanics. He discovered in himself a real talent for meeting customers on the drive. It

required a great deal of time before he could accept a direct order; he not only resented the order, he resisted it in some way. Often, this resistance manifested itself as a less than adequate performance.

His relationship with the instructor and his fellow students started to grow in a positive direction, and with it his self-confidence. He later left the station to attack his academic studies with more vigor and has since graduated.

The counseling provided by various members of the counseling staff was absolutely vital both to the student and the instructor. Without the counseling department, he probably would never have graduated.

Since graduation he has been employed by the Honeywell Company in a placement made with the assistance of our work coordinators. His supervisor reports that he is doing very well.

Case Study #5

The subject of this report is a girl who enrolled in Marketing and Merchandising at the Center. Her performance at the school she left had been adversely affected by acute problems in the home.

After a brief time she entered the WOC service station program as a cashier. She was delighted at the attention she received as the only girl at the station. Before many weeks went by she indicated an interest in driveway sales and service. The results were surprising. She found that she enjoyed greeting customers on the drive. She also worked on greasing cars and doing minor repair jobs. Her achievement in other classes increased until she felt that she could return to her former high school.

She applied for a job at a service station and was hired. Income from this job enabled her to move away from home. Since that time she has graduated from high school and is presently employed as a service station accountant.